PEDSTED

PEDESTRIAN SAFETY THROUGH ENVIRONMENTAL DESIGN

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CITY OF LAUDERHILL, FL
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STATISTICS

FLORIDA TRAFFIC CRASH STATISTICS REPORT

2010

7894 CRASHES INVOLVING PEDESTRIANS
7290 PEDESTRIANS INJURED
499 PEDESTRIANS KILLED

2011

7039 CRASHES INVOLVING PEDESTRIANS
6194 PEDESTRIANS INJURED
497 PEDESTRIANS KILLED

FROM 2011-2013, SOUTH FLORIDA IS RANKED #4 AS MOST DANGEROUS PLACE FOR PEDESTRIANS.

THERE WERE 1555 PEDESTRIAN DEATH IN BROWARD FROM 2000-2009.

IN 2012, 180 PEDESTRIAN DEATHS IN BROWARD.

"NO SINGLE FACTOR IS COMPLETELY RESPONSIBLE FOR THE PROBLEM OF PEDESTRIAN-VEHICLES CRASHES RESULTING IN INJURIES AND FATALITIES. A COMBINATION OF UNSAFE PEDESTRIAN BEHAVIOR, VEHICLE AND DRIVER FACTORS, PROBLEMATIC PHYSICAL ENVIRONMENTS AND OTHER SPECIAL CONDITIONS ALL CONTRIBUTE TO THEM."

Campbell, B.C. Zegeer, H. Husang and M. Cynecki (2004), A Review of Pedestrian Safety Research in the United States and Abroad. USDOT, FHA

" IN A RECENT STUDY OF 7,000 PEDESTRIAN-VEHICLE CRASHES IN FLORIDA, RESEARCHERS DISCOVERED THAT PEDESTRIANS WERE AT FAULT IN 80% OF THESE INCIDENTS."

Lee, C, and M. Abdel-Aty (2005) "Comprehensive Analysis of Vehicle-Pedestrian Crashes at Intersections in Florida." Accident Analysis and Prevention.

Florida: Types of Pedestrian Crashes

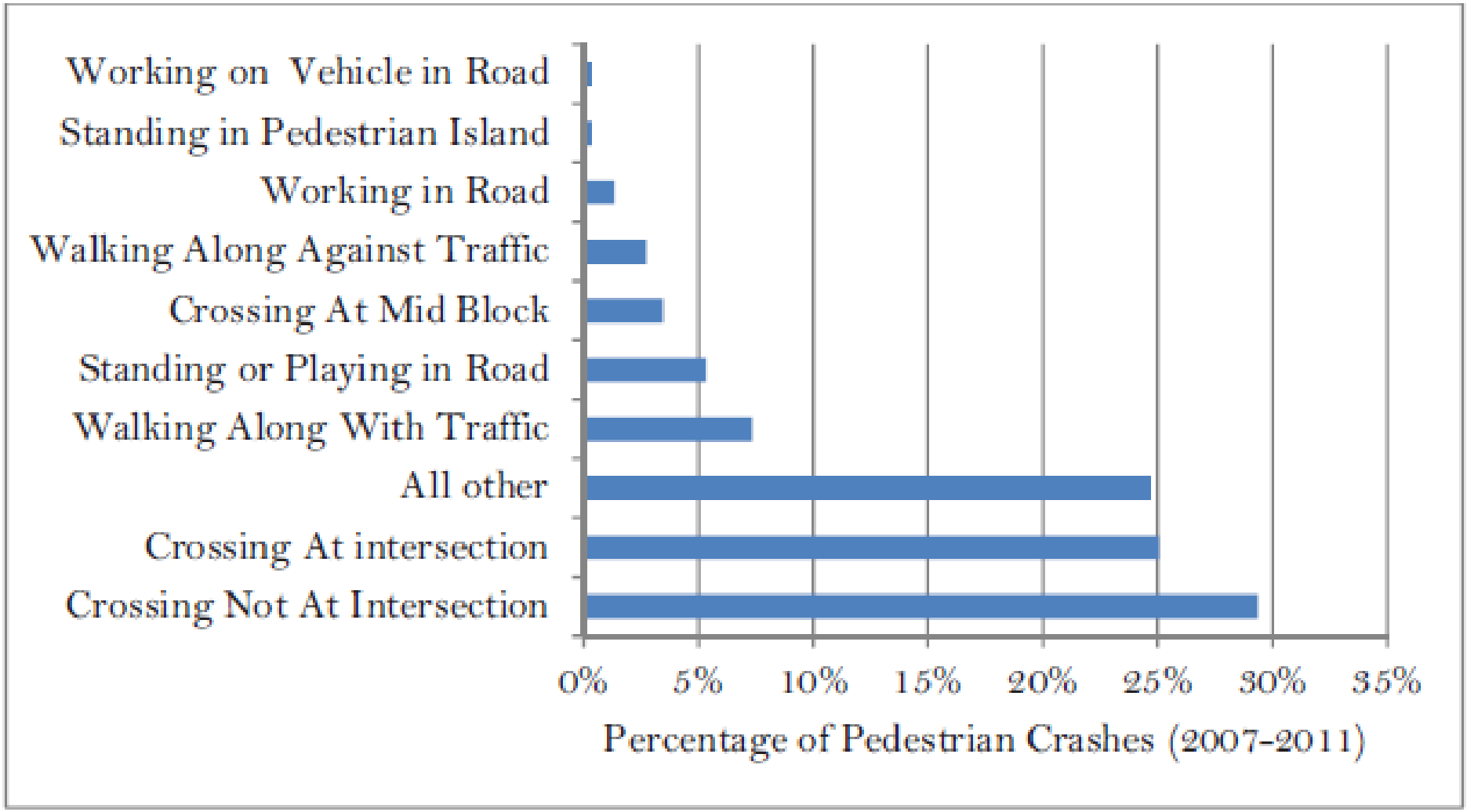
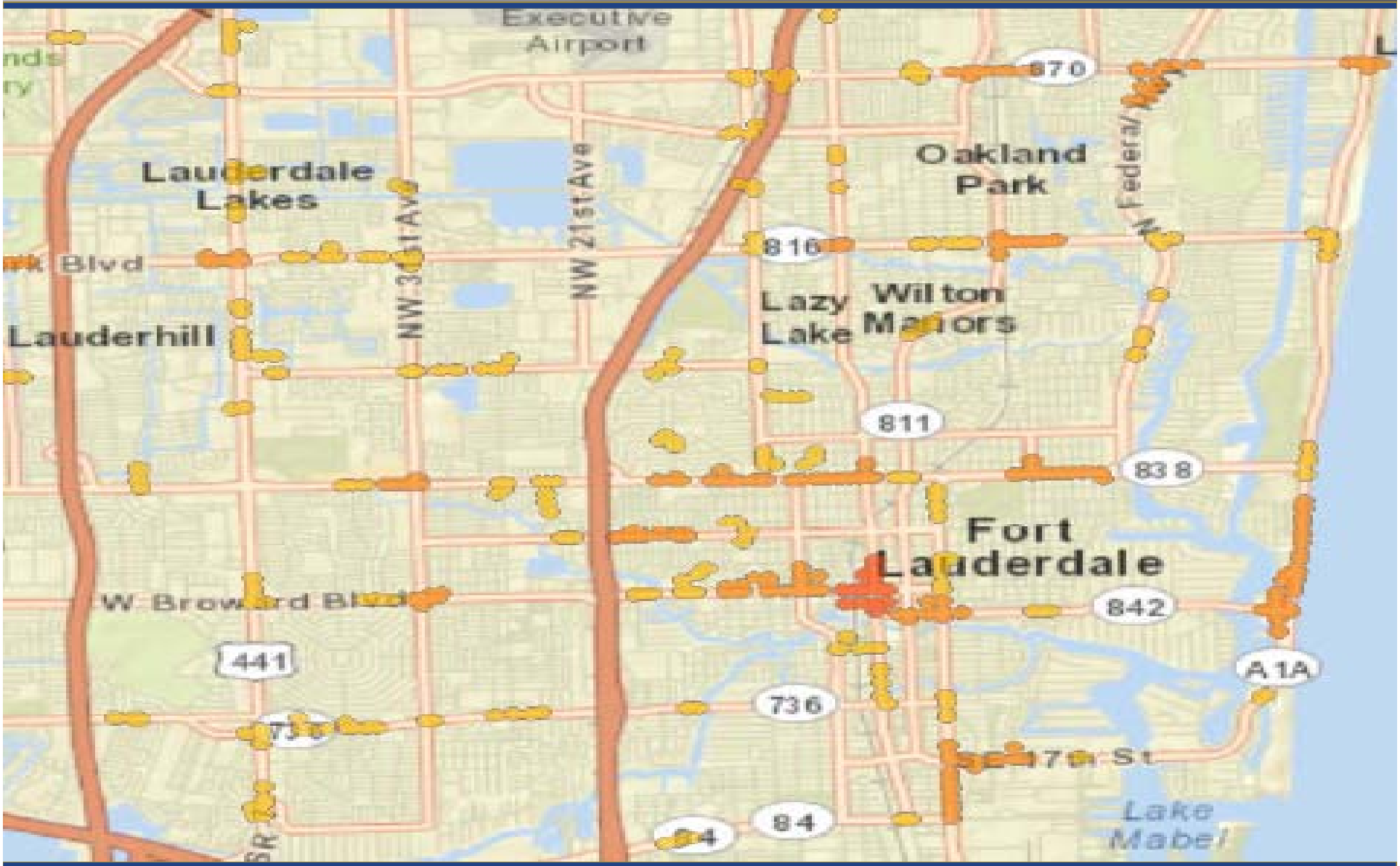


Figure 2-12. Statewide pedestrian crashes by pedestrian action.

Source: FDOT CAR System.

District 4: Where are PED Crashes Recurring



"JAYWALKING IS OFTEN CITED AS A POOR PEDESTRIAN BEHAVIOR THAT LEADS TO PEDESTRIAN INJURIES AND FATALITIES."

Mullen, B., C. Cooper, and J. Driskell (1990) "Jaywalking as a Function of Model Behavior." Personality and Social Psychology Bulletin


Jaywalker crossing
on University Drive

"MIDBLOCK CROSSING IS IMPLICATED IN 55 PERCENT OF ALL FATAL PEDESTRIAN-VEHICLE CRASHES."

Cui, Z., and S. Nambisan (2003). "Methodology for Evaluating the Safety of Midblock Pedestrian Crossings." Transportation Research Record.

"IF CONVENIENT MIDBLOCK CROSSWALKS WERE AVAILABLE AT POPULAR CROSSING POINTS, PEDESTRIANS COULD CROSS THESE AREAS THAT WOULD OTHERWISE BE UNSAFE AND ILLEGAL."

Heinonen, Justin A., and John E. Eck (2007). "Pedestrian Injuries and Fatalities Guide No. 51." Center for Problem-Oriented Policing.


Median brick walkway located
in area which is not designated
for a midblock crossing
on University Drive
© 2014 Google
Image Date: March 2011
Report a problem


EXAMPLE: ON HALLANDALE BEACH BLVD.
WHERE ISLAND IN MEDIAN IS CREATED ALMOST INVITING PEDESTRIANS TO TRAVEL WHERE THEY ARE NOT SUPPOSED TO BE.

“THE SHORTEST DISTANCE BETWEEN TWO POINTS IS A STRAIGHT LINE.”

CONSIDER LAND USE DESIGN AND PEDESTRIAN INGRESS/EGRESS TO PROPERTIES

817
Landings St
Landings Way
817
100 ft
20 m

HISTORICALLY TRANSPORTATION PLANNING HAS APPROACHED PEDESTRIAN SAFETY PRIMARILY IN TWO WAYS.

1) WORKING WITH DRIVERS TO CHANGE THEIR DRIVING HABITS AS WELL AS IMPROVING DRIVER AWARENESS.
2) BY CREATING SAFE CROSSING ZONES FOR PEDESTRIANS.

RARELY IS THE PEDESTRIAN'S OWN BEHAVIOR INCLUDED IN TRANSPORTATION PLANNING BY TRYING TO DISCOURAGE DANGEROUS SITUATIONS. STUDIES HAVE SHOWN THAT IN MANY CASES THE FAULT LIES WITH THE PEDESTRIAN.

NON PEDSTED APPROACH

METHODS OF IMPROVING PEDESTRIAN WALKING BEHAVIOR WITHOUT MAKING ENVIRONMENTAL CHANGES:

1) ENFORCE JAYWALKING LAWS- OFTEN A LOW PRIORITY FOR POLICE, CREATING CONFLICTS BETWEEN RESIDENTS AND CITY OFFICIALS. CONSIDERED A NUISANCE TO ENFORCE.
2) EDUCATION- CREATING PROGRAMS TO TEACH SCHOOL CHILDREN HOW TO PROPERLY CROSS A STREET REQUIRE SCHOOLS TO BE INVOLVED. THE PROBLEM IS THAT MANY ADULTS ARE THE ONES THAT NEED THE EDUCATION AND TEACH THEIR CHILDREN BAD PEDESTRIAN BEHAVIOR. ALSO, ANY EDUCATIONAL CAMPAIGN REQUIRES SUBSTANTIAL MEDIA EXPOSURE.

A NEW APPROACH – PEDSTED

METHODS OF IMPROVING PEDESTRIAN WALKING BEHAVIOR BY MAKING ENVIRONMENTAL CHANGES:

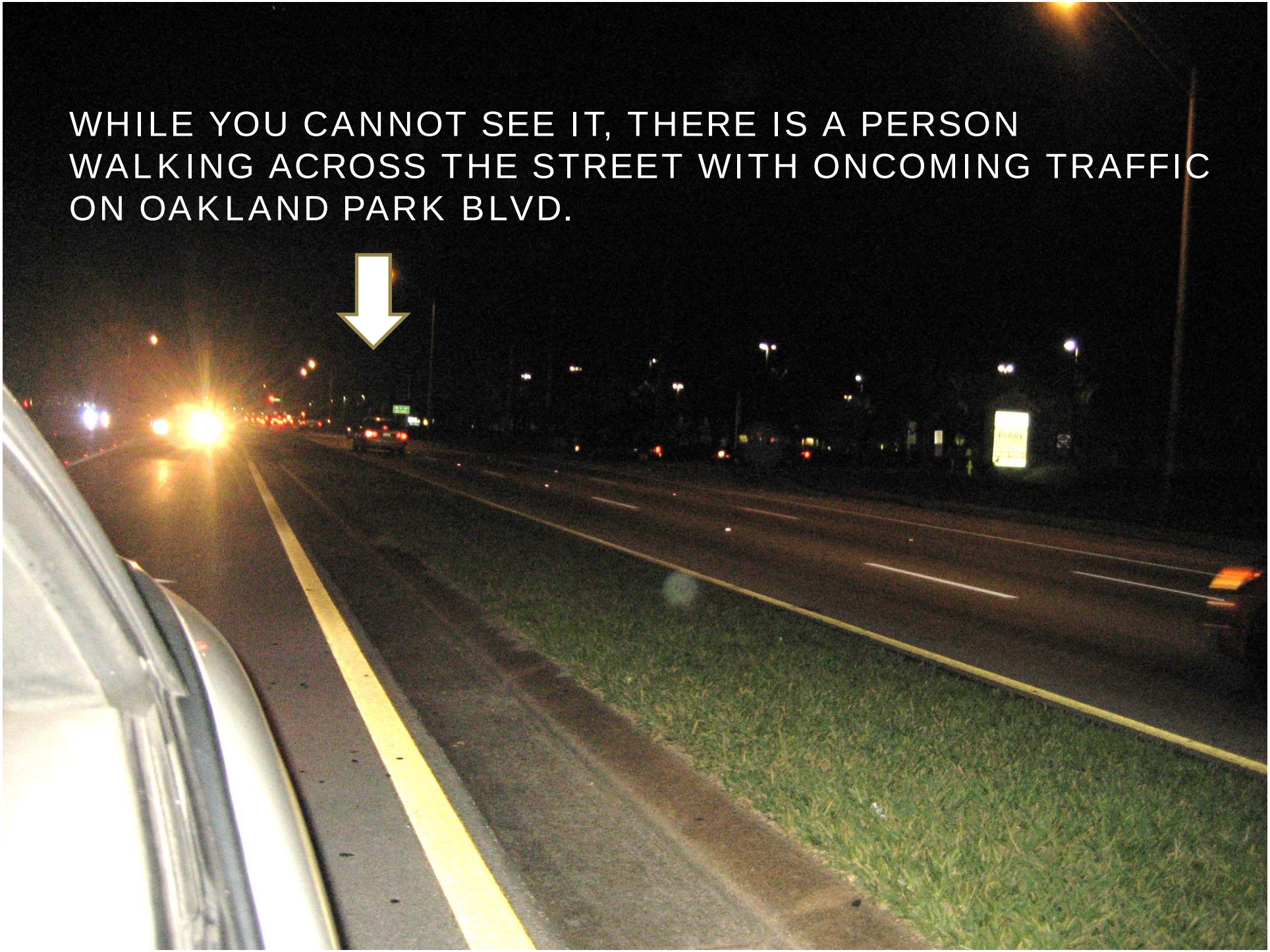
PEDSTED- PEDESTRIAN SAFETY THROUGH ENVIRONMENTAL DESIGN

APPROACHING THE PROBLEM IN THE SAME WAY AS,

CPTED- CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

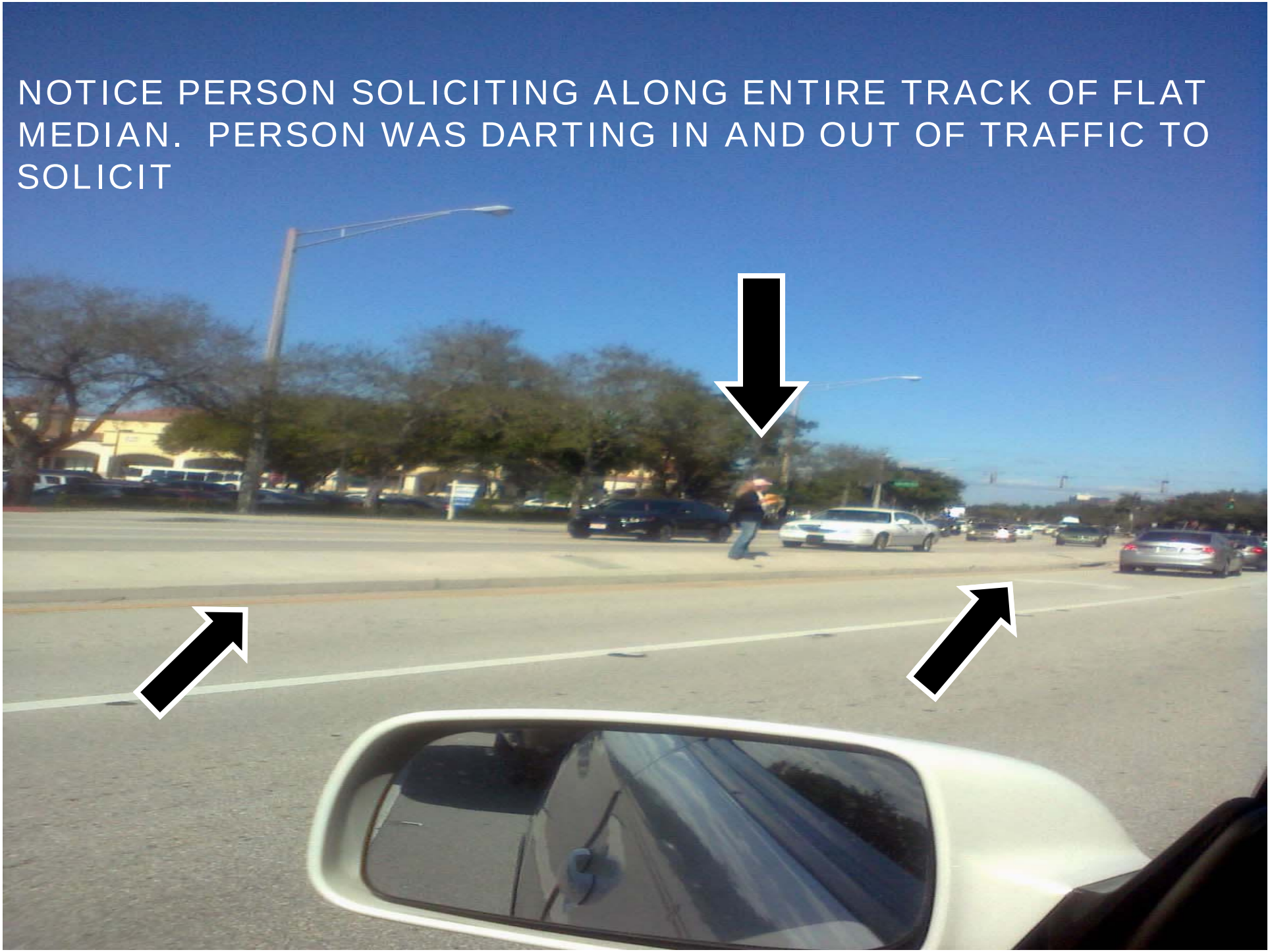
NO METHOD WILL COMPLETELY SOLVE THE PROBLEM, BUT COMBINING DIFFERENT APPROACHES WILL HELP TO CHANGE OR PREVENT UNWANTED BEHAVIOR. IF SOMEONE WANTS TO VIOLATE THE LAW AND IGNORE SAFETY PRECAUTIONS, THEY WILL FIND A WAY TO DO IT.

FLAT BRICK MEDIAN IS PERFECT TO RIDE OR WALK ON. NOTICE THE BICYCLIST RIDING ON THE MEDIAN ON COMMERCIAL BLVD.


WHILE YOU CANNOT SEE IT, THERE IS A PERSON WALKING ACROSS THE STREET WITH ONCOMING TRAFFIC ON OAKLAND PARK BLVD.


THIS PERSON WAS SOLICITING FOR CONTRIBUTIONS. RIGHT AFTER THIS PICTURE WAS TAKEN HE RAN INTO MOVING TRAFFIC TO GET A DONATION FROM THE CENTER LANE. ON UNIVERSITY DRIVE. NOTICE THE FLAT WALKING AREA.
45

NOTICE PERSON SOLICITING ALONG ENTIRE TRACK OF FLAT MEDIAN. PERSON WAS DARTING IN AND OUT OF TRAFFIC TO SOLICIT



APPLYING PEDSTED PRINCIPALS:

PROBLEM #1: PEOPLE CROSSING IN FRONT OF A BUS WHEN THEY GET OFF. DRIVERS CAN'T SEE PEDESTRIANS COMING INTO STREET, AND PEDESTRIANS DO NOT CROSS AT CROSSWALKS SINCE IT MAKES THE WALK A BIT FARTHER.

SOLUTION: PLACING A SAFETY BAR IN FRONT OF THE BUS LIKE SCHOOL BUSES OR RAILING ALONG SIDEWALKS

RESULT: TO FORCE PEOPLE TO WALK TO A LOCATION SO THEY WOULD BE MORE VISIBLE TO DRIVERS AND MAY HAVE TO USE DESIGNATED CROSSWALKS. ALTERNATIVE, IF THEY INSIST ON GOING AROUND THE SAFETY BAR THEY ARE MORE LIKELY TO BE SEEN BY DRIVERS GIVING ADDITIONAL EARLY WARNING.


14 JEFFERY EXPRESS
1413


20
Metres


SIMPLE BARRIERS.
BARRIER CAN BE
MOVED FORWARD TOO.


A GA-Q

PROBLEM #2: PEDESTRIANS CROSSING STREETS IN LOCATIONS OTHER THEN AT CROSSWALKS

SOLUTION #1: MID-CROSSING BARRIERS USING LANDSCAPING, FENCES AND HUMPS

Berger, in R. Retting, S. Ferguson and A. McCartt, (2003). "A Review of Evidence-Based Traffic Engineering Measures Designed to Reduce Pedestrian-Motor Vehicle Crashes." American Journal of Public Health

SOLUTION #2: RAILING ALONG SIDEWALKS

RESULT: BY PREVENTING PEDESTRIANS FROM CROSSING IN DANGEROUS, UNDESIGNATED AREAS THEY WILL BE FORCED TO CROSS AT SAFER DESIGNATED PLACES.

MEDIAN FENCE BARRIERS WERE INSTALLED IN DC (4FT) AND NY (6 FT). 61% OF PEDESTRIANS IDENTIFIED THE BARRIER AS THE REASON FOR USING THE CROSSWALK. 48% SAID IT FORCED THEM TO USE THE CROSSWALK. BEFORE THE MIDBLOCK BARRIER WAS INSTALLED 61% CROSSED MIDBLOCK OUT OF CONVENIENCE.

Berger, W.G., Urban Pedestrian Accident Countermeasure Experimental Evaluation Study, National Highway Traffic Safety Administration, Fed. (1975)


A GOOD EXAMPLE OF A PEDSTED MIDBLOCK BARRIER PREVENTING PEDESTRIANS FROM CROSSING. ON HALLANDALE BEACH BLVD. IN HALLANDALE BEACH.
MEDICAL
1117
PLAZA
BUT NOTE

CAPS PLACE ON FLAT MEDIAN SURFACES PREVENT PEDESTRIANS FROM STANDING ON THEM


voice

HOWEVER, AS PREVIOUSLY STATED, EVEN IF PEDSTED PRINCIPALS ARE APPLIED, THERE ARE THOSE THAT WILL IGNORE SAFETY MEASURES

GOOD PEDSTED BARRIER WITH BREAK IN LANDSCAPING. NOTICE THE PEDESTRIAN CROSSING ON HALLANDALE BEACH BLVD.

THE END

COMMENTS?